

CLAIMS

1. A holographic recording medium comprising: two transparent substrates; a holographic recording material layer sandwiched therebetween; and a spacer integrally embedded in this holographic recording material layer, the spacer being composed of at least either a large number of beads or fibers for regulating a gap between the two transparent substrates, wherein the spacer is arranged around a recording area of the holographic recording layer.

2. The holographic recording medium according to claim 1, wherein the spacer is formed in a continuous lattice configuration, and the recording area is formed in each lattice cell.

3. The holographic recording medium according to claim 1 or 2, wherein the spacer is composed of a large number of spherical beads.

4. The holographic recording medium according to claim 1 or 2, wherein the spacer is composed of a plurality of fibers, and the fibers form at least one connection gap therebetween for each of the recording areas.

5. The holographic recording medium according to claim 1

or 2, wherein

the spacer is composed of fibers, and necked parts for letting a liquid holographic recording material in and out of the recording area are formed in peripheries of the fibers in
5 a longitudinally intermittent fashion.

6. A method for manufacturing a holographic recording medium, comprising:

a step of forming a frame for surrounding at least one recording area on a transparent substrate;

10 a step of injecting a liquid holographic recording material into the frame;

a step of arranging a spacer composed of at least either a large number of beads or fibers along the frame before detaching the frame from the holographic recording material;

15 a step of attaching the transparent substrate to one press stage with a layer of the holographic recording material upward;

a press step of pressing a second transparent substrate against the layer of the holographic recording medium by using
20 another press stage via an elastic member; and

a step of curing at least periphery of the layer of the holographic recording material in this pressed state.

7. The method for manufacturing a holographic recording medium according to claim 6, comprising the step of arranging
25 another spacer between the spacers arranged along the frame,

thereby defining a plurality of recording areas in an area surrounded by the spacers arranged along the frame.